



**New England's
Tony Caranci**

Turf Management

Products Budgets & Philosophy

THERE'S NOTHING MAGIC about managing a golf course. It's just like any business where the executive is responsible for a million dollars of real estate which has to be programmed for the pleasure and relaxation of a large group of people. It's a matter of evaluation, planning, execution, and follow-through," according to Anthony B. Caranci, the golf superintendent at Ledgesmont Country Club, Seekonk, Massachusetts.

Tony Caranci should know. He grew up in a family of golf superintendents and completed the Agronomy and Turf Managers course at the University of Massachusetts. His late father was Anthony B. Caranci, Sr., the golf course superintendent at Louisquissett Golf Course and Valley Ledgesmont Country Club. His brother is Thomas A. Caranci — well known on the West Coast and currently superintendent at Oahu Country Club in Hawaii. Tony took over the Ledgesmont Country Club seventeen years ago, after several years at Louisquissett.

The Ledgesmont golf course was about six years old when Tony arrived. "Its problems were just be-

ginning to show up," reports Tony.

"I realized that as I presented my annual maintenance budget, I had to present my Long-Term Grounds Maintenance Program. The two were inter-related. Each year planning and budgeting had to take care of a portion of the over-all goals."

Listening to Tony, one soon grasps that the biggest problem he faced was water. There was either too much on the surface or not enough to irrigate.

To solve the problems of too much water, twelve holes have been reconstructed to improve the drainage, and this reconstruction program still continues on an annual basis. "Turfgrass is very sensitive to wet feet as well as to drought."

Tony's ingenuity was needed to solve the drought problem. When the local water shortage limited irrigation, Tony moved water from a nearby gravel pit, over the natural land contour, to keep the irrigation system going and the grass alive. The long-range problem has been solved by constructing two lakes on the course. Now, water can be pumped from a newly installed well about one-quarter mile away or from the

golf course. The water is held in the lakes for use in the irrigation system when needed.

This good water management has also improved the ecology of the area. The club cannot dig wells on its own ground, because the town of Seekonk draws its water supply from wells on the golf course. Now, with adequate lake reservoirs the irrigation system can run at optimum, and water is actually being returned to the land.

"Since the name of the game is putting the first concern of the golf course manager is the putting surface," Tony comments.

The turfgrass choice was Vesper velvet bent. And "to make the greens an even better test of golf" Tony designed contours into the surface as greens were reconstructed to improve drainage. Hazards were also brought into play. "As the sand traps were refaced they were no longer left hidden but contoured into the landscape.

"Landscaping is important to the aesthetics as well as the play pattern," says Tony. So, annually trees, both evergreen and deciduous, are
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Tony Caranci, superintendent, Ledgemont Country Club.

TURF MANAGEMENT (from page 14)

added to the course. They are used to "screen out walking people and the skyline." These barriers also protect golfers from stray balls. Trees are also planted around greens to frame them for the benefit of the approaching golfer.

With an average of 30,000 rounds annually, the tees need to be large enough "to hold a good stand of turfgrass". Almost all tees have been reconstructed and made larger. They were seeded to good permanent strains of grass such as Merion Kentucky Bluegrass and fescue mixtures.

The irrigation system was already underway when Tony took over the Ledgemont course. An underground manual quick comping system, it was designed to handle the irrigation for tees, fairways, and greens.

The fairways had to be started from scratch to get rid of annual bluegrass *Poa annua*. And in his usual concern for the membership, Tony presented three plans, "One was to completely kill off all grasses and reseed. The second plan was to kill one-half of the fairway at a time and reseed, leaving the other half for play. The third plan was chosen which was to annually overseed

with permanent strains of grass seed. Fairways are now a balanced mixture of desirable bluegrasses and fescues.

Consulting the membership for guidance with long-range plans is still a part of the "Caranci management practices". For instance, this season one-half of the practice putting green has been seeded with Kingston Velvet Bent and the other half with Penncross Bent. The membership will now vote on which grass provides them the best putting surface.

"Having participated in the choice, the membership will cooperate better while we develop better putting greens," comments Tony.

Once the greens, tees, and fairways are constructed properly, the good permanent grasses are established, and the landscape revolves around its seasonal beauty, the job becomes one of keeping the course that way. And, Tony Caranci is an expert in the cultural, mechanical, and chemical practices needed to do the job.

As a visiting instructor to the University of Rhode Island, Tony tells the students, "the practicing golf course superintendent must have a

well-rounded knowledge in many fields. Not only is he a business manager, personnel administrator, purchasing agent, contractor, and mechanic, but he has to know about such subjects as grass nutrition, plant pathology, entomology, weed control, irrigation, public relations, ecology, and landscaping."

Tony's knowledge of these latter subjects enables him to produce fine fairway turf that will withstand regular mowing at 1/2 inch to 7/8 inch. This turfgrass also has to be tolerant to summer heat and humidity. It has to withstand disease and mechanical wear. And Tony insists that fairway turf has to do all this "while staying firm enough to hold the ball up and still not become mated or puffy."

"The fundamental need of grass that is growing and constantly being cut is plant food, and in the correct amount for the particular strain of grass.

"Our fairways annually received 3 pounds of nitrogen per 1,000 square feet. Since timing is important, 400 pounds per acre of balanced fertilizer (1 pound of N) per 1000 square feet are applied in the spring and 800 pounds per acre in the fall.

"We've also learned to apply about one-half of the 800 pounds in early September, leaving the balance for November application. The fairways look better all winter and get a better start in the spring."

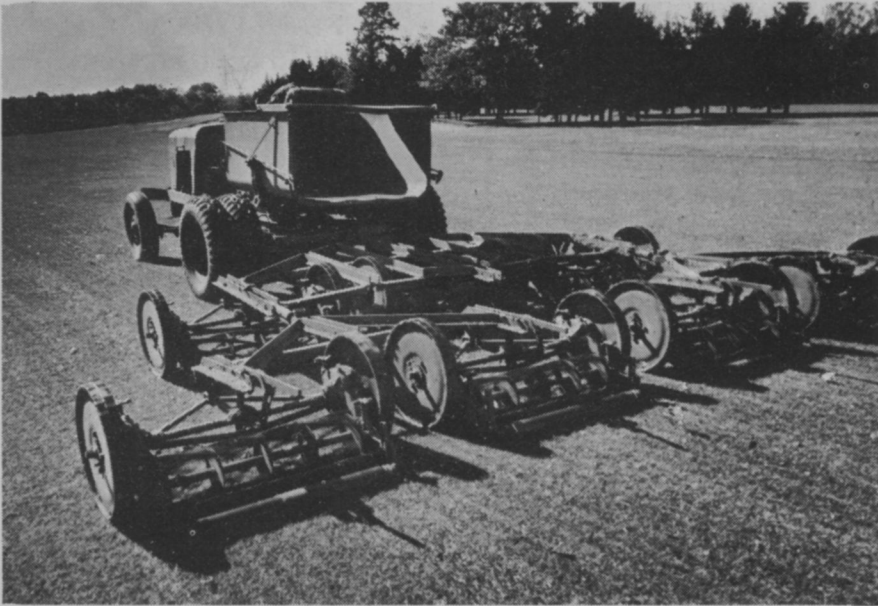
Tony has his general fertilizer custom mixed. Whether it's a 10-6-4 or a 20-5-10, the nitrogen sources are 75% organic with 50% from "Blue Chip" granular "Nitroform" and 25% from activated sewage sludge.

The 4-1-2 ratio is used when there is a need to cut the phosphorus supply to retard *Poa annua*.

Tony runs his own tests under field experience before specifying a mix. "I had my first encounter with "Nitroform" way back in the fall of 1957; and, I pioneered in finding a manufacturer who would be willing to use it in my custom mix. Regardless of whom I now buy from, I still specify the 75% organic product."

"The results on my fairways were so outstanding that after a golf superintendent conference here at our club, other superintendents started specifying the same mix. And many are still using it today."

Tony doesn't hesitate to explain why he likes this 75% organic formula. "The 'Nitroform' has a built-in release which gives the uniform growth needed on today's irrigated fairways and tees. The sludge acts as a good soil conditioner for this clay soil and supplies trace elements along with some of the nitrogen. The



Fairways are aerified twice a year. Caranci uses a slicer in the fall and overseeds at the same time. Here, new turfgrass is coming up in the cut made by the slicer. When the course opens for play in the spring the turf will be in top-notch condition.

wide use of irrigation has helped to create the need for these slow-release products. Even though I could have the labor to do the job with solubles, this combination is easy to use and results in even

growth and color."

Other essentials in Tony's program for fairways include mowing a minimum of four times a week. This has mowers out every day in some
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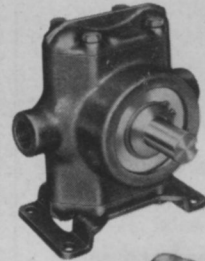
A broadcast spreader is used to apply Caranci's prescription fertilizer mix. Fairways annually receive three pounds of nitrogen per thousand square feet. Nitroform ureaform fertilizer plus activated sewage sludge is used. The built-in release gives uniform growth needed on irrigated fairways and tees.



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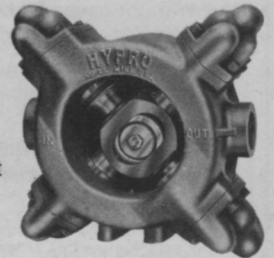
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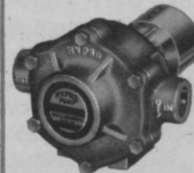
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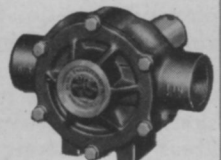
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Water was one of the early problems with which Caranci had to cope. There was either too much on the surface or not enough to irrigate. This lake was constructed to supply water for irrigation on the course. It also serves as a hazard for golfers.

TURF MANAGEMENT (from page 37)

area. The cutting height for summer is $\frac{3}{8}$ inch, for spring and fall $\frac{1}{2}$ inch.

Every 4 to 5 years chlordane is used for grub control. Fungicides are used to prevent disease. Acti-dione ferrated, Thiram 75, 3336 systemic, cadmium chloride are among those that have been combined for broad-spectrum control on fairways during the growing seasons. Cadmium chloride is alternated with these fungicides during the growing sea-

son. It is also applied in early November to catch the winter diseases in their incubation stage.

The Ledgemont fairways are aerified twice a year. "In the fall, as they are sliced, they are overseeded to repair the ravages of summer play," explains Tony.

As to the amount of irrigation, Tony knows that "one inch of water per week" is a very arbitrary rule of thumb. He recommends relating the

This greens-mower is in operation six days a week. Bentgrass greens stay $\frac{1}{8}$ inch tall. Even during the months when greens are not actively growing, a mower is used to keep the standard height.



rate of pumping to the ability of the soil surface to absorb water, which is also altered by atmospheric conditions. "To maintain the optimum field capacity at Ledgemont, it takes ten hours of pumping at a rate of 800 gallons per minute."

Tony's solution for weed control is, "the best weed control is to grow turfgrass. We have used Dicamba and 2,4-D when needed. Now the dandelions and plantain are under control. Clover, chickweed, and knotweed seldom show up in a serious infestation."

With most tees large enough now to hold the grass under heavy traffic, the driving distances can also be varied with wind conditions and tournament needs. "Keeping Merion cut at one-half inch means that the rest of the turf care better be right," says Tony.

Monthly, except July and August, the tees receive a pound of N per 1,000 square feet during the golfing season. The 75% organic balanced fertilizer used on the fairways is also the workhorse on tees. The slow release and balance of nutrients assure a constant, steady source of the right kind of plant food.

Tees are verticut, aerified, and overseeded only in the fall. Irrigation depends on rainfall, and averages every third day. A preventative disease program is scheduled annually. The same materials are used on tees as on fairways.

Using the most efficient materials and practices on the tees and fairways programs more crew time for greens maintenance. Mowing six days a week, the bentgrass greens stay $\frac{1}{8}$ inch high. They are aerified and topdressed twice a year, and spiked as needed.

Watering is scheduled daily, when the rainfall is not adequate. Since the water requirements vary with each green, the watering time prescribed for each green is based on the rate of absorption.

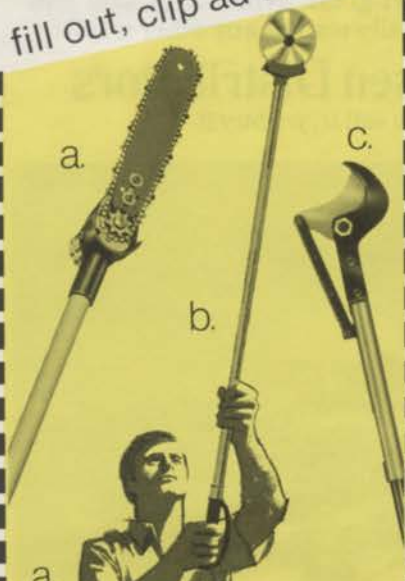
"Preventive programs are vital to keep greens free of disease and insect damage. Sod webworm, cutworm, chinch bug are the most serious culprits. Insecticides such as Sevin, Diazinon, and chlordane may be used as often as twice a month, and gives adequate control," asserts Tony.

"In season, fungicides such as Acti-dione ferrated and Thiram 75 are used every seven days to give broad-spectrum control. For winter disease control, cadmium chloride is applied twice in the fall, and mercuric chlorides are usually applied twice in mid-winter, with the sec-

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Fairways are mowed a minimum of four times a week. Mowers are kept busy in some areas of the course every day. Cutting height varies according to season, $\frac{3}{8}$ inch in summer and $\frac{1}{2}$ inch in fall.

TURF MANAGEMENT (from page 52)

ond coming after the January or early February "thaw." The rate for early fall is one ounce per 1,000 square feet and for mid winter, 3 ounces per 1,000 square feet.

Fertilization is equally important to the greens. They need a steady supply of balanced nutrients. In April and May, about three-quarters pound of N per 1,000 square feet is applied each month. This balanced fertilizer 20-5-10 is 50% organic with 25% granular "Nitroform" and 25% sludge. This banks some slow-release nitrogen in the soil. During June, July, and August, $\frac{1}{4}$ pound of N is applied every other week with one-half of the nitrogen in soluble form and the other half sludge.

For better color prior to a tournament the above treatment may be repeated after seven days. In September and October the balanced fertilizer with 50% organics is repeated at the rate of one pound of N per 1,000 square feet. This banks nutrients for the winter and early spring green up.

The budget is fixed at the figure required "to do the job." Payroll takes about 75 percent. Twelve percent is for all chemicals, fertilizers, and seed. Fertilizer is roughly one-third of this portion. The remaining 12 percent covers utilities, equipment, and other maintenance, and miscellaneous necessities.

The capital and annual investment in Ledge-mont pays off for the area.

Like all large turf areas, the golf course acts as an oxygen factory. The grass takes up the carbon dioxide and releases nitrogen. Sheltering a wide utility right-of-way, it offers more than the normal open spaces. And as already stated, its water management provides a water resource.

Quick to realize the public relations aspects, Tony comments, "Large tracts of land without concrete and housing, properly planted with trees and grass, are becoming more and more essential to our over-all ecology for water and air resources. The water table is getting lower and lower and the air is getting more and more polluted."

Whether campaigning to be councilman of North Providence, performing the role of the visiting instructor serving as an officer in a golf course superintendent association, speaking at an educational conference, serving in the armed services, or managing the Ledge-mont course, Tony Caranci is the dedicated individual with the "considerable diversification" that he tells his students is necessary. He makes the job of golf superintendent challenging and rewarding. He is "truly one of the professional turfgrass managers and business executives" needed to handle the complex technology of today's golf courses.